

II. Listing of Claims

Please amend the claims as follows:

CLAIMS

1. (Currently Amended) A vehicle safety arrangement for a vehicle, the arrangement comprising:

    a sensor unit comprising at least one sensor responsive to acceleration, the sensor unit being located substantially along a central longitudinal line of the vehicle, the sensor unit having a signal processor for sampling data gathered by the one or more sensors;

    an at least one actuator for activating a safety device, the actuator being located remotely from the sensor unit; and

    a control unit located remotely from the sensor unit and from the actuator, the control unit being operable to receive information from the sensor unit and to transmit an actuating actuation command to the actuator to activate the safety device, ~~wherein the control unit comprises no sensors responsive to acceleration, and the sensor unit comprises a signal processor for sampling data gathered by sensors of the sensor unit.~~

2. (Original) A safety arrangement according to Claim 1, wherein the sensor unit is located on a central tunnel of the vehicle.

3. (Currently Amended) A safety device according to Claim 1 or ~~2~~, wherein the sensor unit comprises at least two sensors responsive to acceleration, which are configured to measure at least longitudinal and lateral acceleration of the vehicle.
4. (Currently Amended) A safety arrangement according to ~~any preceding~~ Claim 1, wherein the at least one sensor responsive to acceleration is configured to measure vertical acceleration of the vehicle.
5. (Currently Amended) A safety arrangement according to ~~any preceding~~ Claim 1, wherein the signal processor is operable to transmit the sampled data to the control unit.
6. (Currently Amended) A safety arrangement according to ~~any preceding~~ Claim 1, wherein the signal processor is ~~operable~~ operable to perform a crash algorithm, which causes the signal processor to instruct the control unit to transmit the an actuating command to the actuator.
7. (Currently Amended) A safety arrangement according to ~~any one of~~ Claims Claim 1 or 5, wherein the signal processor is operable to receive the output of a decision algorithm, which determines whether the vehicle is in a crash situation.
8. (Currently Amended) A safety arrangement according to Claim 7, wherein the decision algorithm is performed in by the control unit.

9. (Currently Amended) A safety arrangement according to any preceding Claim 1, wherein the signal processor is operable to receive data from other additional remote sensors.

10. (Currently Amended) A safety arrangement according to any preceding Claim 1, wherein the sensor unit comprises one or more sensors operable to measure an angular velocity of the vehicle around a longitudinal axis thereof.

11. (Currently Amended) A safety arrangement according to any preceding Claim 1, wherein the actuator comprises an ignitor for igniting a charge to activate the safety device.

12. (Currently Amended) A safety arrangement according to any preceding Claim 1, wherein the control unit comprises one or more capacitors configured to store sufficient energy to cause the actuator to activate the safety device.

13. (Original) A safety arrangement according to Claim 12, wherein the discharge of the one or more capacitors comprises the actuation command.

14. (Currently Amended) A safety arrangement according to any preceding Claim 1, wherein the at least one actuator is located in a unit that also comprises a capacitor configured to store energy to activate the safety device, the capacitor being discharged to activate the safety device in response to the actuation command.

15. (Currently Amended) A safety arrangement according to ~~any preceding~~ Claim 1, further comprising at least one left side sensor on a left side of the vehicle and at least one right side sensor on a right side of the vehicle.

16. (Currently Amended) A safety arrangement according to ~~any preceding~~ Claim 1, wherein the control unit is connected to a main battery of the vehicle, and supplies power to the sensor unit and to the actuator.

17. (Currently Amended) A safety arrangement according to ~~any preceding~~ Claim 1, wherein the sensor unit has a smaller volume than that of the control unit.

18. (Original) A safety arrangement according to Claim 17, wherein the sensor unit has a volume less than half that of the control unit.

19. (Currently Amended) A safety arrangement according to ~~any preceding~~ Claim 1, wherein the sensor unit has a smaller mass than that of the control unit.

20. (Original) A safety arrangement according to Claim 19, wherein the mass of the sensor unit is less than half that of the control unit.

21. (Currently Amended) A safety arrangement according to ~~any preceding~~ Claim 1, wherein the sensor unit provided on a single microchip.

22. (Cancelled)

23. (Cancelled)